

Prof. J. Lederberg
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MADISON 6 (Wisconsin)

Dear Dr. Lederberg,

Thank you very much for your letter dated December 15, which arrived when I was away. I shall answer your different questions in order:

1.- I have no reprints from the Ciba Symposium but I am sending by ordinary mail some other reprints.

2.- I am sending by air-mail some K.12 made colicinogenic for different colicins (all are derived from Wollman strain 112-12 which is cystin-histidine deficient, gal.4-, T.1r, S.r, and non lysogenic; any non colicinogenic K.12 may be used as indicator).

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TR.24	=	112-12	made)	col. by	CA.18	and	producing	colicin	B
TR.25	=	112-12	"	"	K.235	"	"	"	K
TR.27	=	112-12	"	"	TR.10	"	"	"	I + E(2)
TR.28	=	112-12	"	"	K.30	"	"	"	E(1)
12-9	=	112-12	"	"	K.9	"	"	"	I
12-94	=	112-12	"	"	K.94	"	"	"	V

3.- The problem has not been studied any further. When both strains are F- there is no transfer of colicinogenicity but if the colicinogenic strain is made F+ then the transfer occurs. If the colicinogenic strain is F- and the other F+ there is a transfer but it is as yet not decided if it is a transfer from F- to F+ or if there is first a transfer of F to the colicinogenic strain and then transfer of colicinogenicity from F+ to F+.

4.- Your suggestion of using the symbol of plasmids for the colicinogenic factors is quite valuable. I found it perhaps a little premature for 2 reasons:

a) I think that colicinogenic factors are more virus-like than plasmid-like.

b) It would be quite coherent for the colicinogenic factor governing production of colicin E (1) but other results are obtained with ~~of~~ other colicins that I am now studying. Particularly in the case

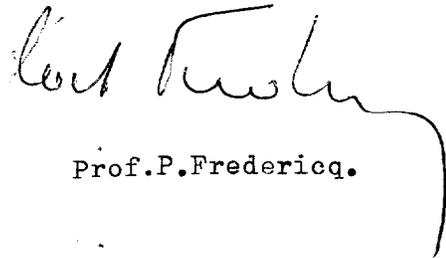
of colicin I there are some lethal effects which seem to be linked to the selected markers used, and to interfere with the ²transfer of colicinogenicity or immunity to it.

5.- I have no indication of such a phenomenon because it is difficult (though possible) to distinguish immune cells from cells which have lost the receptor.

6.- Thank you very much for your proposal to come as an honored guest of your laboratory. In fact I am coming to the States next March to stay 3 months at Cold Spring Harbor. I shall travel during June and hope to be able to visit you on my way. I shall write to you about it. As regard my coming to your laboratory, it is very appealing to me and I shall be glad to discuss it with you. However I do not think that I could come before 1960 or 1961 and in any case it would be difficult for me to be absent more than 3 or 4 months.

7.- I am sending strain CA.46 with the other strains.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "Prof. P. Fredericq", with a long, sweeping underline that extends to the right.

Prof. P. Fredericq.